Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Service Rules for Advanced Wireless Service	)	WT Docket No. 02-353
In the 1.7 and 2.1 GHz Bands	)	
	)	

COMMENTS OF VERIZON WIRELESS

Verizon Wireless hereby responds to the Commission's request for comments on the appropriate service rules for Advanced Wireless Services (AWS) in the newly allocated 1.7 and 2.1 GHz bands, including provisions for applications, licensing, operating and technical rules.[1]

I. THE COMMISSION SHOULD FIRST MAKE CLEAR THAT LICENSEES WILL HAVE EXCLUSIVE RIGHTS TO THE SPECTRUM.

One of the principle conclusions of the Spectrum Task Force Report was the importance of the "exclusive use" model in spectrum management.[2] Specifically the Task Force noted that "where rights and responsibilities are clearly defined and effectively enforced, the characteristics of this model – e.g., exclusivity, flexibility, and

[1] In the Matter of Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Notice of Proposed Rulemaking,* 17 FCC Rcd. 24135 (2002) ("*Notice*").

[2] *See gen. Spectrum Policy Task Force Report*, ET Docket 02-135 (rel. Nov. 15, 2002).

transferability – generally provide a clear framework for market-based assignment and negotiation of access rights among spectrum users, thereby limiting transaction costs."[3]

In light of these recent findings, Verizon Wireless is surprised that the *Notice* does not attempt to address the scope of AWS licensees' rights at all. It does not attempt to define what rights to the spectrum licensees will hold if they obtain AWS spectrum. As we have said elsewhere,[4] market principles play an important role in spectrum management. But, in order for a market for spectrum to function properly, the Commission must establish clear rights for licensees and be vigilant in upholding those rights. Once those rights are established, the Commission should permit the operation of the market and the pressures of competition to ensure that spectrum is used efficiently.

Instead of seeking to define AWS licensees' rights, the Commission only poses standard questions about appropriate size license blocks, whether there should be competitive bidding and which existing rule part should apply. As a result, the *Notice* fails to address one of the fundamental issues in spectrum policy today. When it made its recommendations to the Commission last year, the Spectrum Task Force noted the many benefits of providing licensees greater clarity as to the scope of their rights.[5] The questions the Commission poses here, however, do nothing to clarify or protect a licensee's exclusive rights to the spectrum in question. The Commission has already taken action with respect to the Task Force's recommendations on providing more

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[3] *Id.* at 38.

[4] *See gen.* Verizon Wireless Reply Comments (filed July 24, 2002) in Spectrum Policy Task Force Seeks Public Comment On Issues Related To Commission's Spectrum Policies, *Public Notice*, 17 FCC Rcd. 10560 (2002).

[5] *See Spectrum Policy Task Force Report*, Recommendation 29.

spectrum for *unlicensed* services.[6] It is time for it to take action on some of the Task Force's recommendations with respect to *licensed* services, and that action should occur *before* the Commission proceeds with the other issues raised by the notice.

II. THE COMMISSION SHOULD ADOPT A FLEXIBLE APPROACH TO LICENSING AWS SPECTRUM

Verizon Wireless agrees with the Commission's tentative conclusion to permit fixed and mobile services in these bands.[7] A combination of Part 24 and Part 27 rules would provide the right balance between maximizing licensees' flexibility and providing a stable environment for investment in these bands and thus would be completely consistent with the criteria specified in 303(y)(2) of the Communications Act.[8]

Verizon Wireless recommends three special provisions. First, the Commission should establish a "substantial service" performance requirement similar to the general performance requirement contained in Part 27, which requires licensees to "make a showing of 'substantial service' in their license area within the prescribed license term. . . ."[9]

As a general rule, Verizon Wireless believes that performance requirements for auctioned services are probably unnecessary. In today's highly competitive market, a licensee that has paid for its licenses has incentives not to warehouse spectrum and is likely to sell its licenses, or portions thereof, rather than have them lie fallow. However,

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[6] *See* Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band, *Notice of Inquiry*, ET Docket No. 02-380, FCC 02-238 (rel. Dec. 20, 2002).

[7] *See Notice* at ¶ 12.

[8] 47 U.S.C. § 303(y).

we acknowledge that the Communications Act requires the Commission to have a performance requirement.[10] Given that the types of next generation PCS and cellular or advanced wireless services that carriers will offer in the spectrum are still unknown, the Commission should adopt as flexible a requirement as possible. Adoption of a "substantial service" requirement for this spectrum would balance the objectives of the Act with licensees' need for flexibility. As the Commission has stated elsewhere, "The 'substantial service' construction requirement provides licensees with the flexibility to offer the full range of services under the allocations table and accommodate new and innovative services."[11]

Second, because some government operations will not be cleared from the band for several years, we urge the Commission to adopt an initial license term longer than 10 years.[12] For example, for 700 MHz services, it set a renewal date well after the date by which broadcasters would be expected to be cleared from the spectrum.[13] In order to accommodate the winning bidders' loss of use of the spectrum for those years in which the 1.7 GHz band remains encumbered, the Commission should either adopt an initial

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[9] *See* 47 C.F.R. § 27.14.

[10] *See* 47 U.S.C. § 309(j)(4)(B).

[11] *See* Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, Report and Order,* 15 FCC Rcd. 476 (2000) *("700 MHz Order")* at ¶ 70.

[12] *See Notice* at ¶ 44.

[13] 47 C.F.R. § 27.13(a). *See also 700 MHz Order* at ¶ 70.

license term for 10 years after the date by which all government operations are expected to be cleared from the band or, in the alternative, an initial license term of 15 years. [14]

Third, the Commission should clearly define bands for mobile transmitters and base transmitters. The Commission did not require this in the PCS band. However, it was quite clear from the record that users of broadband PCS spectrum would be offering very similar if not the same services. Thus although the Commission did not clearly define PCS base and mobile transmit bands, it was in the best interest of the carriers acquiring the spectrum to reach private agreements as to the standards of operation in the bands. While the AWS band will be used to complement existing cellular and PCS services, the spectrum is likely to be purchased for a variety of purposes. As a result, the Commission cannot rely on private incentives to ensure the type of interference protection that results from establishing clearly in advance that one set of frequencies will be used for mobile transmit, the other for base transmit.[15] In addition, since the AWS 2.1 GHz band is immediately adjacent to spectrum assigned to mobile satellite services (MSS), if the Commission does not restrict operations in the AWS band to base transmissions only, there will be interference into the MSS band. Moreover, adopting clear rules separating mobile and base transmit bands would be consistent with 303(y)(2)(C) of the Communications Act, which states that the Commission has the

[14] The Commission should establish a renewal expectancy for AWS licenses in the same manner that it has done for other services in other bands. *See Notice* at ¶ 43.
[15] We would expect any fixed use of the band to operate base transmitters in the same band as those for mobile applications.

authority to provide flexibility if "such use would not result in harmful interference among users."[16]

III. A PLAN TO RELOCATE INCUMBENT USERS SHOULD BE ADOPTED BEFORE LICENSE BLOCKS ARE CONSIDERED

The Commission should not move forward on defining geographic and frequency blocks when it does not yet know for certain how long some of these frequencies will remain encumbered by government operations or where these operations will be relocated. The ideal way to approach the issue of clearing the band is to determine the best possible spectrum blocks and geographic areas and then work to clear the band accordingly. However, there is still much the industry does not know about how and when the spectrum located at 1.7 GHz will be made available for commercial use, and those issues must be better understood before the Commission can make a final determination about spectrum blocks and geographic areas. It is also unclear how the Commission can make these decisions prior to exploring proposals in NTIA's *2002 Viability Assessment* in a further reallocation proceeding that it has not yet initiated.[17] In its 3G Order, the Commission deferred several commenters' questions about how the reimbursement/reallocation process will work until that proceeding is initiated.[18] It is premature, however, to consider such issues as geographic area designations and frequency blocks sizes absent the completion of the underlying reallocation proceeding.

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[16] 47 U.S.C. § 309(y)(2)(C).

[17] In the Matter of Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, *Second Report and Order,* 17 FCC Rcd. 23193 (2002) ("*3G Order*") at ¶ 26.

[18] *Id.,* n. 91.

Furthermore, it would be premature to adopt spectrum-clearing rules until the Commission has given Congress sufficient time to enact a Spectrum Relocation Fund.[19] As Verizon Wireless has previously noted it would be more efficient, and more expeditious, if the reimbursements paid to Federal agencies for relocation related expenses were paid through the proceeds of any auction used to reassign the spectrum.[20] The establishment of such a process would substantially reduce post-auction transaction costs, provide greater certainty to commercial operators regarding the cost and timing of relocations, and give Federal agencies greater control over the relocation process. Having that process in place is essential to resolving other issues the Commission considers here.

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[19] *See Fiscal Year 2004 Budget of the U.S. Government, Appendix* at 225. *See also* U.S. Department of Commerce, *Letter from Theodore W. Kassinger, General Counsel, to The Honorable Richard B. Cheney, President of the Senate, Regarding a Draft Bill to Amend the Communications Act of 1934 to Create a Spectrum Relocation Fund* ("Relocation Fund Transmittal Letter"), (sent Jul. 23, 2002), available at http://www.ntia.doc.gov/ntiahome/congress/2002/legistransmittal7232002.htm. A Spectrum Relocation Fund would pay Federal agencies in advance for relocation-related expenses using the proceeds from the auction of licenses in the 1710-1755 MHz band. Last year's proposed legislation called for NTIA to provide the FCC with a cost estimate and schedule for the relocations in advance of the auction. This provision is important because it establishes the reserve price for the auction and provides necessary information to prospective bidders about the timing of the relocations. It is not clear, however, how this process would apply to systems that continue to operate on a secondary basis – i.e., systems that may or many not be relocated depending on whether they cause harmful interference.

[20] Comments of Verizon Wireless Comments in In the Matter of Amendment of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, *FCC Seeks Comment on the National Telecommunications and Information Administration's Report "An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands,"Public Notice,* 17 FCC Rcd. 14390 (2002) at 9-10 (filed August 8, 2002).

IV. THE COMMISSION SHOULD CREATE GEOGRAPHIC LICENSES THAT PROMOTE THE FLEXIBLE AGGREGATION OF SPECTRUM

When a band clearing plan is established, the Commission should create geographic license blocks that range in size from nationwide to Economic Areas (EAs), and should include at least one nationwide license and two Economic Area Grouping (EAGs), which could be aggregated into nationwide coverage. Areas covered by Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) are generally too small. It is likely that any carrier participating in the auction of such geographic areas would be required to aggregate spectrum regardless of its business plan. In addition, if the Commission were to provide a sufficient number of frequency blocks (*see infra)* that cover a range of geographic areas, it would permit both frequency and geographic aggregation, thereby maximizing licensees' ability to meet their needs.

Auctioning at least some large geographic areas would encourage rapid deployment of service, promote interoperability and the setting of standards, and allow economies of scale that will encourage the development of low cost equipment. In previous proceedings where the Commission adopted EAGs, the Commission acknowledged the importance of such large areas.[21] Developments in the CMRS market confirm the Commission's analysis in the 700 MHz Order that awarding licenses for large service areas is the best way to promote rapid deployment of a new service. The efficiencies and economies of scale resulting from expanding a carrier's footprint have driven mobile carriers toward assembling either regional or national service areas.

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[21] *See 700 MHz Order* at ¶ 57.

Regional and national "single rate" pricing plans that once were innovative are now the norm.[22] As the Commission has rightly acknowledged elsewhere, "while individual parties will be able as part of the auction process to aggregate service areas or to join bidding consortia to obtain spectrum rights to areas smaller than the Commission's licensing areas, there are risks and costs associated with attempting to do either."[23] Either for existing carriers adding to their holdings or for newly established carriers needing to compete effectively, providers offering service on the AWS bands will need to cover fairly large geographic areas.

Adopting nationwide and EAG licensing for a portion of the spectrum and Major Economic Areas (MEAs) and Economic Areas (EAs) for the remainder strikes the right balance between providing carriers with sufficient continuous area to be able to compete effectively, without creating the problems and disincentives that many carriers (particularly small companies or new entrants) would face were they forced to bid on larger regional or nationwide licenses.[24] EAs are also small enough to use for a "fill-in"

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[22] The Commission has documented both trends in its CMRS Competition Reports. In its most recent report, "[t]he Commission has concluded previously that operators with larger footprints can achieve certain economies of scale and increased efficiencies compared to operators with smaller footprints. Such benefits, along with advances such as digital technology, have permitted companies to introduce and expand innovative pricing plans such as digital-one-rate ("DOR") type plans, reducing prices to consumers." (In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Seventh Report*, 17 FCC Rcd. 12985, 12997-98 (2002).)

[23] *700 MHz Order* at ¶ 57 (footnote omitted).

[24] By dividing the licenses in a way that permits both large and small license groupings, the Commission can accommodate a broad range of bidders. Parties interested in acquiring broad service areas can either bid directly on nationwide licenses or simply acquire multiple EAGs and combine them to assemble the footprint they desire to serve.

strategy or to add capacity. Finally, any problems regarding size of license should be ameliorated if the Commission, as it has for many other services, permits post-auction partitioning and aggregation of licenses for those bidders whose business plans require smaller or larger geographic areas.[25] Such rules will allow post-auction transactions to facilitate the most efficient distribution of licenses.

Verizon Wireless agrees with the Commission that the amount of spectrum it has allocated– 90 megahertz – "is large enough to support IMT-2000 protocols and would provide flexibility to accommodate a variety of channelization plans."[26] The Commission notes that the record shows that AWS licensees will likely employ bandwidth-intensive functions, including high-speed data transfer and internet access, and will offer multimedia applications, such as full-motion video.[27] Verizon Wireless believes that even such high bandwidth services will require spectrum licenses that are paired and symmetrical. Although some may argue that in the short term spectrum assignments can be either unpaired or asymmetrical, over the longer term, we believe that applications such as voice over IP will require similar size upstream and downstream channel blocks. Again, because of the potential for large bandwidth applications the Commission should create at least one 30 (2x15) MHz paired license. The remaining spectrum should also be allocated in symmetrical pairings, but in a manner that would facilitate "building" licenses to the size necessary to meet carriers' specific needs.

Parties interested in acquiring additional capacity, or fill-in or regional footprints, can bid on EAs.

[25] *See Notice* at ¶ 21.

[26] *3G Order* at ¶ 24

[27] *3G Order* at ¶ 9.

III. CONCLUSION

Prior to taking any action on the AWS service rules, the Commission should clarify that AWS licensees will have exclusive rights to these frequencies, and define the scope of these rights. It should also adopt a spectrum clearing plan. The Commission can then adopt AWS licensing and service rules that provide appropriate flexibility to licenses so that the AWS band can serve the public.

Respectfully submitted,

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Certificate of Service

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